

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2008; month=4; day=17; hr=15; min=44; sec=9; ms=577; ]

=====

Application No: 10561877 Version No: 1.0

Input Set:

Output Set:

Started: 2008-04-02 13:30:52.963  
Finished: 2008-04-02 13:30:54.150  
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 187 ms  
Total Warnings: 10  
Total Errors: 0  
No. of SeqIDs Defined: 14  
Actual SeqID Count: 14

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)

# SEQUENCE LISTING

<110> GOGGINS, MICHAEL G.  
NORIHIRO, SATO

<120> METHYLATED GENE BIOMARKERS FOR DETECTING CANCER

<130> (71699) 61506

<140> 10561877

<141> 2008-04-02

<150> PCT/US04/020535

<151> 2004-06-24

<150> 60/482,146

<151> 2003-06-24

<160> 14

<170> PatentIn Ver. 3.3

<210> 1

<211> 2313

<212> DNA

<213> Homo sapiens

<400> 1

```

gaattccttg tacttttttt cccttctcag ttctgcactt aactcgtcta aaaaaattaa 60
aaaagaattt aagaaaccac aaagctaagc tgggtgcggt ggctcacgcc tgtaatccta 120
gcactttggg aagccaaggc attcggattg cccaagctca ggagttcgag accagcctgg 180
gcaacatggt gaaaccccat ttctactaaa aatacaataa attagctggg tgttgtggca 240
tgtgcgcctg taatcccagc tactctggag gctgaggcgc gataattgct tgaaccggg 300
aggcagaggt tgcagtgagc cgaaatcata ccactgcact ccagcctggg cgacagagt 360
agtgagactc tgtctcaaaa caaaacaaaa caaacaaaa aaaaaaccgg aaaccaacaa 420
aactttttga ggaacaaagg gaaccaggta ttttattaat tctcatacct ccagagtgtt 480
aggcacaaaa taaacattca accaagacct gttgcactga gcagttcata tataacagga 540
gtgacccaag ttgaaacgta gaatcagccc tctcatacca ctttttgcca ggtgatcata 600
ggcaagttac ttagcatcta tgtttcctta ttattaaaat ggtcataatt acaatgccta 660
agataagggg gttgctgtga agattattaa atcctcagta aactttggtt attgttactc 720
ctatgattat catcaatatc atcaattacc ttatctgttc aatactggtg gcacaggtcc 780
accagctaga tgtctaattc cttatgtgtc tattagtggg acaagtggag tttgagtggg 840
atTTTTTTTT tTTTTTTTaa gaccagttcc aaatcatcaa ggatgatacc actagtagca 900
gcttgtcttg tctgtacagt ggtaagtcct ggcttgcct ttgtggcaa tacaaccccc 960
ttgaattgct tggcccttct cagcattgcc taatattagg gaggactcct gtaaagctca 1020
ctgggttaga gatcaagaca cttgggcctg gttctgcccc tgggggccat tgggtaattc 1080
cttssagtct ccaggcctca cttgccctct gaacaagaaa gaggcctgtt ctggatcatc 1140
ctccagcctg tccagcctg gcaactctgt agtcggttta ggcagcagcc cgggaacaga 1200
tgaggcaggc aggggtggga cgtttggtca ggacagccca ccgcaaaaag aggaggaaag 1260
aatgaaaga cagagacagc tttggctatg ggagaaggag gaggccgggg gaaggaggag 1320
acaggaggag gagggaccac ggggtggagg ggagatagac ccagcccaga gctctgagt 1380
gtttcctgtt gcctgtctct aaaccctcc acattcccgc ggtccttcag actgcccga 1440
gagcgcgctc tgccctgccg ctgectgect gccactgagg tatgtgtgac ccccgcccag 1500
cctttccctt ctatagttgc accaaccctg acaccctcgt tcacgccgtc agctcgtgtg 1560
caaggaggag aagctctgct gaggatgcgc ctctcctccc ggctccatca cggctcccct 1620

```

```

taagagcatg gccctcggtc ctgtctgcct gttgcttttc agaaggtgga ctactgtgt 1680
aactttgtct tcccttacag gtttacagga aaataatctc actatgttct tcgggggagc 1740
attttctcac tctctgtttt tctctgtgtc tgtctctggt ttcagaggct gcctgcctgt 1800
cctctttgct ccctttgcaa atgtggcagc ctctcctttt cctgggaatc tgatcccatc 1860
acagctgcca cagggacctg gccagcaacc ggagtctgtc ctccagatct cggtcagggg 1920
ttctgttttc caaaaaggga ctttgcagaa caatcagttg atctctgaaa gggaaagggg 1980
gaggcttcac cattaatcca cacctctggg aagcttctgt tttcctctaa ttctcctcac 2040
tcccaaacac caccttcctg ccccccata cacaaatttc agcaccattc tgctgaaat 2100
ggcaccatca caacctcagt cttgggttag gtgtgttcc tgtcctgagt tccttgggat 2160
ggtaaacaca ggcagtagcc cttagtttat ctagatctga aaaccagac atcagatata 2220
gtcaaccaag acatgggtgt aatgggaggt ggagtgtgct gggggagata ttctcagaag 2280
ggggaaaggg ggaagggaag agggagagaa ttc 2313

```

<210> 2

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 2

atttagttta gagttttgag tgg 23

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 3

acaaaacttc cctcccttac 20

<210> 4

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 4

tttttttagat tgtttggaga gtg 23

<210> 5

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 5

aactaacaac ataaacaaaa atatc

25

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 6

gagagcgcggt tttgtttgtc

20

<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 7

aacgacgtaa acgaaaatat cg

22

<210> 8

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 8

tttssagttt ttaggtttta tttgtttttt gaataagaaa gaggtttgtt ttgggtatatt 60  
ttttagtttg tttagttttg gtattttgtg agtcggttta ggtagtagtt tcggaataga 120  
tgaggtaggt aggggttgga cgtttggtta ggatagttta tcgtaaaaag aggaggaaag 180  
aatgaaaaga tagagatagt tttggttatg ggagaaggag gaggtcgggg gaaggaggag 240  
ataggaggag gagggattac ggggtggagg ggagatagat ttagtttaga gttttgagtg 300  
gttttttgtt gtttggtttt aaattttttt atattttcgc ggttttttag attgttcgga 360  
gagcgcggtt tgtttgtcgt ttgtttgttt gttattgagg tatgtgtgat ttctgttttag 420  
tttttttttt ttatagttgt attaatttcg atattttcgt ttacgtcgtt agttcgtgtg 480  
taaggaggag aagttttgtt gaggatgcgt tttttttttc ggttttatta cggttttttt 540  
taagagtatg gttttcgtt ttgtttgttt gttgtttttt agaagtgga tttattgtgt 600  
aattttgttt ttttttatag gtttatagga aaataatttt attatgtttt tcgggggagt 660  
atttttttat tttttgtttt tttttgtgtt tgtttttggt ttttagaggtt gtttgtttgt 720  
tttttttgtt tttttgttaa atgtggtagt tttttttttt tttgggaatt tgattttatt 780  
atagttgtta tagggatttg gtttagtaatc ggagtttgtt ttttagattt cggttagggg 840  
ttttgttttt taaaaaggga tttttagtaa taattagttg atttttgaaa gggaaagggg 900  
gaggttttat tattaattta tatttttggg aagtttttgt ttttttttaa ttttttttat 960

ttttaaatat tatttttcgt ttttttaata tataaaatattt agtattattt tgtttgaaat 1020

<210> 9

<211> 360

<212> DNA

<213> Homo sapiens

<400> 9

ataggaggag gagggattat ggggtggagg ggagatagat ttagtttaga gttttgagtg 60  
gttttttgtt gtttggtttt aaattttttt atatttttgt ggttttttag attgtttgga 120  
gagtgtgttt tgtttggtt ttgtttgttt gttattgagg tatgtgtgat ttttgtttag 180  
tttttttttt ttatagttgt attaatattg atatttttgt ttatgttgtt agtttggtgtg 240  
taaggaggagg aagttttgtt gaggatgtgt tttttttttt ggttttatta tggttttttt 300  
taagagtatg gtttttggtt ttgtttgttt gttgtttttt agaaggtgga tttatttgtt 360

<210> 10

<211> 360

<212> DNA

<213> Homo sapiens

<400> 10

ataggaggag gagggattac ggggtggagg ggagatagat ttagtttaga gttttgagtg 60  
gttttttgtt gtttggtttt aaattttttt atattttcgc ggttttttag attgttcgga 120  
gagcgcgttt tgtttgctgt ttgtttgttt gttattgagg tatgtgtgat tttcgttttag 180  
tttttttttt ttatagttgt attaatattc atattttcgt ttacgtcgtt agttcgtgtg 240  
taaggaggagg aagttttgtt gaggatgcgt tttttttttt ggttttatta cggttttttt 300  
taagagtatg gttttcgtt ttgtttgttt gttgtttttt agaaggtgga tttatttgtt 360

<210> 11

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 11

aagatccatg agaatgagaa g 21

<210> 12

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
primer

<400> 12

aaaagcgggt ggtgcaatg 19

<210> 13  
<211> 10  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 13  
atgtgaagag 10

<210> 14  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
oligonucleotide

<400> 14  
tttttttttt tttttttttt tttt 24